GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: January 6, 2005, 18:24:46 ; Search time 85 Seconds
(without alignments)
1521.924 Million cell updates/sec

Title: US-09-762-105A-14
Perfect score: 182
Sequence: 1 gagctcgctcccccgccgtc.....tgactggtggacaggctagc 182

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 824507 seqs, 355394441 residues

Total number of hits satisfying chosen parameters: 1649014

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	111.2	61.1	168	4	US-09-351-123-5	Sequence 5, Appli
	2	89.6	49.2	171	1	US-08-217-360-16	Sequence 16, Appl
	3	86.4	47.5	129	2	US-08-189-256A-25	Sequence 25, Appl
	4	86.4	47.5	129	3	US-09-193-853-25	Sequence 25, Appl
	5	86	47.3	140	2	US-08-189-256A-19	Sequence 19, Appl
	6	86	47.3	140	3	US-09-193-853-19	Sequence 19, Appl
	7	86	47.3	164	2	US-08-189-256A-26	Sequence 26, Appl
	8	86	47.3	164	3	US-09-193-853-26	Sequence 26, Appl
	9	85.8	47.1	127	4	US-09-635-132-16	Sequence 16, Appl
	10	85.8	47.1	201	4	US-09-011-336-58	Sequence 58, Appl
	11	85.4	46.9	161	2	US-08-189-256A-18	Sequence 18, Appl
	12	85.4	46.9	161	3	US-09-193-853-18	Sequence 18, Appl
	13	85.4	46.9	165	2	US-08-189-256A-4	Sequence 4, Appli
	14	85.4	46.9	165	3	US-09-193-853-4	Sequence 4, Appli
	15	85.4	46.9	168	2	US-08-189-256A-2	Sequence 2, Appli
	16	85.4	46.9	168	3	US-09-193-853-2	Sequence 2, Appli
	17	85.4	46.9	184	3	US-09-283-419-3	Sequence 3, Appli
	18	85.4	46.9	258	2	US-08-189-256A-24	Sequence 24, Appl
	19	85.4	46.9	258	3	US-09-193-853-24	Sequence 24, Appl
	20	85.4	46.9	300	3	US-09-202-316-4	Sequence 4, Appli
	21	85.4	46.9	300	3	US-09-202-316-7	Sequence 7, Appli
c	22	85.4	46.9	1134	2	US-08-189-256A-10	Sequence 10, Appl
c	23	85.4	46.9	1134	3	US-09-193-853-10	Sequence 10, Appl
c	24	85.4	46.9	1143	3	US-09-142-114B-6	Sequence 6, Appli
	25	85.4	46.9	1208	2	US-08-189-256A-28	Sequence 28, Appl
	26	85.4	46.9	1208	3	US-09-193-853-28	Sequence 28, Appl
	27	85.4	46.9	1416	2	US-08-189-256A-27	Sequence 27, Appl
	28	85.4	46.9	1416	3	US-09-193-853-27	Sequence 27, Appl
	29	85.4	46.9	1417	3	US-09-142-114B-7	Sequence 7, Appli
c	30	85.4	46.9	2962	2	US-08-189-256A-3	Sequence 3, Appli
c	31	85.4	46.9	2962	3	US-09-193-853-3	Sequence 3, Appli
	32	84.8	46.6	144	4	US-09-655-378A-163	Sequence 163, App
	33	84.8	46.6	3984	1	US-08-040-753-1	Sequence 1, Appli
	34	84.8	46.6	5231	4	US-09-100-703A-27	Sequence 27, Appl
	35	83.8	46.0	105	4	US-09-597-877-9	Sequence 9, Appli
	36	83.2	45.7	187	1	US-08-096-182A-7	Sequence 7, Appli
	37	83.2	45.7	187	1	US-08-877-109-7	Sequence 7, Appli
	38	83.2	45.7	187	3	US-08-798-760-7	Sequence 7, Appli
	39	83.2	45.7	187	5	PCT-US94-08327-7	Sequence 7, Appli
	40	83	45.6	139	1	US-08-217-360-13	Sequence 13, Appl
	41	83	45.6	146	1	US-08-217-360-17	Sequence 17, Appl
	42	82.8	45.5	104	2	US-08-722-806A-9	Sequence 9, Appli
	43	82.8	45.5	104	3	US-09-337-028-9	Sequence 9, Appli
	44	82.2	45.2	150	2	US-08-189-256A-1	Sequence 1, Appli
	45	82.2	45.2	150	3	US-09-193-853-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-351-123-5
; Sequence 5, Application US/09351123
; Patent No. 6492578
; GENERAL INFORMATION:
; APPLICANT: Staub
; TITLE OF INVENTION: Expression of Herbicide Tolerance Genes
; TITLE OF INVENTION: in Plant Plastids
; FILE REFERENCE: 15336/01/US
; CURRENT APPLICATION NUMBER: US/09/351,123
; CURRENT FILING DATE: 1999-07-10
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 168
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-351-123-5

Query Match 61.1%; Score 111.2; DB 4; Length 168;
Best Local Similarity 88.7%; Pred. No. 1.2e-28;
Matches 133; Conservative 0; Mismatches 13; Indels 4; Gaps 1;

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Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         23 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 82

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTCCCACTAGAAATAATTTTG 126
              |||||||||||||||||||||||| ||    ||  |||        |||||||||||||
Db         83 CAGGGATGGCTATATTTCTGGGAGCGA----ACTCCGGGCGAATTGTAGAAATAATTTTG 138

Qy        127 TTTAACTTTAAGAAGGAGATATACATATGG 156
              ||||||||||||||||||||||  ||||
Db        139 TTTAACTTTAAGAAGGAGATATACCCATGG 168
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RESULT 2
US-08-217-360-16
; Sequence 16, Application US/08217360
; Patent No. 5530191
; GENERAL INFORMATION:
; APPLICANT: MALIGA, Pal
; TITLE OF INVENTION: METHODS FOR PRODUCING CYTOPLASMIC
; TITLE OF INVENTION: MALE STERILITY IN PLANTS AND USE THEREOF IN PRODUCTION OF HYBRI
; TITLE OF INVENTION: SEED
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dann, Dorfman, Herrell and Skillman,

```
;       ADDRESSEE:  P.C.
;       STREET:  1601 Market Street, Suite 720
;       CITY:  Philadelphia
;       STATE:  PA
;       COUNTRY:  USA
;       ZIP:  19103-2307
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/217,360
;       FILING DATE:  24-MAR-1994
;       CLASSIFICATION:  800
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  REED, Janet E.
;       REGISTRATION NUMBER:  36,252
;       REFERENCE/DOCKET NUMBER:  Rutgers University
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (215)563-4100
;       TELEFAX:  (215)563-4044
;   INFORMATION FOR SEQ ID NO:  16:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  171 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA (genomic)
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
US-08-217-360-16

  Query Match             49.2%;  Score 89.6;  DB 1;  Length 171;
  Best Local Similarity   78.3%;  Pred. No. 3e-21;
  Matches  130;  Conservative    0;  Mismatches   14;  Indels   22;  Gaps    1;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 60

Qy         67 CAGGGATGGCTATATTTCTG----------------------GGAGGGAGACCACAACGG 104
              ||||||||||||||||||||                      ||||  ||   |    ||
Db         61 CAGGGATGGCTATATTTCTGGAATTGTGAGCGGATAACAATTGGAGCGAACTCCGGGCGA 120

Qy        105 TTTCCCACTAGAAATAATTTTGTTTAACTTTAAGAAGGAGATATAC 150
                ||    |||||||||||||||||||||||||||||||||||||
Db        121 ATTAGATCTAGAAATAATTTTGTTTAACTTTAAGAAGGAGATATAC 166


RESULT 3
US-08-189-256A-25
; Sequence 25, Application US/08189256A
; Patent No. 5877402
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/189,256A
;      FILING DATE:  31-JAN-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/111,398
;      FILING DATE:  25-AUG-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  25:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  129 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-189-256A-25

  Query Match             47.5%;  Score 86.4;  DB 2;  Length 129;
  Best Local Similarity   89.4%;  Pred. No. 3.3e-20;
  Matches   93;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          6 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 65

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTCCC 110
              |||||||||||||||||||||||| ||   |   ||  ||| |
Db         66 CAGGGATGGCTATATTTCTGGGAGCGAACTCCGGGCGAATTCAC 109


RESULT 4
US-09-193-853-25
; Sequence 25, Application US/09193853
; Patent No. 6388168
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
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;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/193,853
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/189,256
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  25:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  129 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-193-853-25

  Query Match             47.5%;  Score 86.4;  DB 3;  Length 129;
  Best Local Similarity   89.4%;  Pred. No. 3.3e-20;
  Matches   93;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          6 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 65

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTCCC 110
              |||||||||||||||||||||| ||    |    ||  ||| |
Db         66 CAGGGATGGCTATATTTCTGGGAGCGAACTCCGGGCGAATTCAC 109


RESULT 5
US-08-189-256A-19
; Sequence 19, Application US/08189256A
; Patent No. 5877402
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/189,256A
;      FILING DATE:  31-JAN-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/111,398
;      FILING DATE:  25-AUG-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  19:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  140 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-189-256A-19

  Query Match             47.3%;  Score 86;  DB 2;  Length 140;
  Best Local Similarity   90.2%;  Pred. No. 4.7e-20;
  Matches   92;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         17 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 76

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTC 108
              ||||||||||||||||||||||| ||    |    ||  |||
Db         77 CAGGGATGGCTATATTTCTGGGAGCGAACTCCGGGCGAATTC 118


RESULT 6
US-09-193-853-19
; Sequence 19, Application US/09193853
; Patent No. 6388168
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/193,853
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/189,256
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
```

```
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  19:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  140 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-193-853-19

  Query Match             47.3%;  Score 86;  DB 3;  Length 140;
  Best Local Similarity   90.2%;  Pred. No. 4.7e-20;
  Matches   92;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         17 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 76

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTC 108
              ||||||||||||||||||||||| ||   |    ||  |||
Db         77 CAGGGATGGCTATATTTCTGGGAGCGAACTCCGGGCGAATTC 118


RESULT 7
US-08-189-256A-26
; Sequence 26, Application US/08189256A
; Patent No. 5877402
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/189,256A
;      FILING DATE:  31-JAN-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/111,398
;      FILING DATE:  25-AUG-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  26:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  164 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-189-256A-26

  Query Match             47.3%;  Score 86;  DB 2;  Length 164;
  Best Local Similarity   90.2%;  Pred. No. 5e-20;
  Matches   92;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          6 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 65

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTC 108
              ||||||||||||||||||||||| ||   |    ||  |||
Db         66 CAGGGATGGCTATATTTCTGGGAGCGAACTCCGGGCGAATTC 107


RESULT 8
US-09-193-853-26
; Sequence 26, Application US/09193853
; Patent No. 6388168
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/193,853
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/189,256
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  26:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  164 base pairs
;      TYPE:  nucleic acid
```

```
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-193-853-26

  Query Match             47.3%;  Score 86;  DB 3;  Length 164;
  Best Local Similarity   90.2%;  Pred. No. 5e-20;
  Matches   92;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          6 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 65

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTC 108
              ||||||||||||||||||||||| ||    |    ||  |||
Db         66 CAGGGATGGCTATATTTCTGGGAGCGAACTCCGGGCGAATTC 107


RESULT 9
US-09-635-132-16
; Sequence 16, Application US/09635132
; Patent No. 6620601
; GENERAL INFORMATION:
;  APPLICANT: YAMAGUCHI, ISAMU
;  APPLICANT:  NAKASHITA, HIDEO
;  APPLICANT:  YOSHIOKA, KEIKO
;  APPLICANT:  DOI, YOSHIHARU
;  TITLE OF INVENTION: METHODS FOR TRANSFORMATION OF PLANTS, TRANSFORMED
;  TITLE OF INVENTION:  PLANTS AND PROCESSES FOR PREPARATION OF POLYESTERS
;  FILE REFERENCE: 081356/0148
;  CURRENT APPLICATION NUMBER: US/09/635,132
;  CURRENT FILING DATE:  2000-08-09
;  PRIOR APPLICATION NUMBER: JP 11-225832
;  PRIOR FILING DATE: 1999-08-09
;  PRIOR APPLICATION NUMBER: JP 11-225839
;  PRIOR FILING DATE: 1999-08-09
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
;   LENGTH: 127
;   TYPE: DNA
;   ORGANISM: Nicotiana tabacum
US-09-635-132-16

  Query Match             47.1%;  Score 85.8;  DB 4;  Length 127;
  Best Local Similarity   97.8%;  Pred. No. 5.2e-20;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         11 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 70

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||||||| ||
Db         71 GGCAGGGATGGCTATATTTCTGGGAGCGA 99


RESULT 10
US-09-011-336-58
; Sequence 58, Application US/09011336
; Patent No. 6472586
; GENERAL INFORMATION:
;  APPLICANT:  Maliga, Pal
;  APPLICANT:  Allison, Lori A.
;  APPLICANT:  Hasdukiewicz, Peter T.
;  APPLICANT:  Rutgers, The State University of New Jersey
;  TITLE OF INVENTION:  Nuclear-Encoded Transcription System in
;  TITLE OF INVENTION:  Plastids of Higher Plants
;  FILE REFERENCE:  Rut-95-08031
;  CURRENT APPLICATION NUMBER: US/09/011,336
;  CURRENT FILING DATE:  1998-02-10
;  PRIOR APPLICATION NUMBER:  PCT/US96/12671
;  PRIOR FILING DATE:  1996-08-01
;  PRIOR APPLICATION NUMBER:  60/002,136
;  PRIOR FILING DATE:  1995-08-10
;  NUMBER OF SEQ ID NOS:  70
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 58
;   LENGTH: 201
;   TYPE: DNA
;   ORGANISM: N. tobacco
US-09-011-336-58

  Query Match             47.1%;  Score 85.8;  DB 4;  Length 201;
  Best Local Similarity   97.8%;  Pred. No. 6.4e-20;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 62

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||||||| ||
Db         63 GGCAGGGATGGCTATATTTCTGGGAGCGA 91


RESULT 11
US-08-189-256A-18
; Sequence 18, Application US/08189256A
; Patent No. 5877402
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/189,256A
;      FILING DATE:  31-JAN-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/111,398
;      FILING DATE:  25-AUG-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  18:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  161 base pairs
;      TYPE:  nucleic acid
```

```
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-189-256A-18

  Query Match             46.9%;  Score 85.4;  DB 2;  Length 161;
  Best Local Similarity   98.9%;  Pred. No. 7.9e-20;
  Matches   86;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         23 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 82

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||| ||
Db         83 CAGGGATGGCTATATTTCTGGGAGCGA 109


RESULT 12
US-09-193-853-18
; Sequence 18, Application US/09193853
; Patent No. 6388168
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/193,853
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/189,256
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  18:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  161 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-193-853-18

  Query Match             46.9%;  Score 85.4;  DB 3;  Length 161;
  Best Local Similarity   98.9%;  Pred. No. 7.9e-20;
  Matches   86;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         23 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 82

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||| ||
Db         83 CAGGGATGGCTATATTTCTGGGAGCGA 109


RESULT 13
US-08-189-256A-4
; Sequence 4, Application US/08189256A
; Patent No. 5877402
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/189,256A
;      FILING DATE:  31-JAN-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/111,398
;      FILING DATE:  25-AUG-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  165 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-189-256A-4

  Query Match             46.9%;  Score 85.4;  DB 2;  Length 165;
  Best Local Similarity   98.9%;  Pred. No. 8e-20;
  Matches   86;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

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Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 60

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||| ||
Db         61 CAGGGATGGCTATATTTCTGGGAGCGA 87


RESULT 14
US-09-193-853-4
; Sequence 4, Application US/09193853
; Patent No. 6388168
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/193,853
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/189,256
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  165 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-193-853-4

  Query Match           46.9%;  Score 85.4;  DB 3;  Length 165;
  Best Local Similarity   98.9%;  Pred. No. 8e-20;
  Matches   86;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 60

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||| ||
Db         61 CAGGGATGGCTATATTTCTGGGAGCGA 87


RESULT 15
US-08-189-256A-2
; Sequence 2, Application US/08189256A
; Patent No. 5877402
;  GENERAL INFORMATION:
;    APPLICANT:  Maliga, Pal
;    APPLICANT:  Svab, Zora
;    APPLICANT:  Staub, Jeffrey
;    APPLICANT:  Zoubenko, Oleg V.
;    APPLICANT:  Allison, Lori A.
;    APPLICANT:  Carrer, Helaine
;    APPLICANT:  Kanevski, Ivan
;    TITLE OF INVENTION:  DNA Constructs and Methods for Stably
;    TITLE OF INVENTION:  Transforming Plastids of Multicellular Plants and
;    TITLE OF INVENTION:  Expressing Recombinant Proteins Therein
;    NUMBER OF SEQUENCES:  47
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dann, Dorfman, Herrell and Skillman
;      STREET:  1601 Market Street  Suite 720
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103-2307
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/189,256A
;      FILING DATE:  31-JAN-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/111,398
;      FILING DATE:  25-AUG-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US o7/518,763
;      FILING DATE:  01-MAY-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Reed, Janet E.
;      REGISTRATION NUMBER:  36,252
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 563-4100
;      TELEFAX:  (215) 563-4044
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  168 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  not relevant
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-189-256A-2

  Query Match           46.9%;  Score 85.4;  DB 2;  Length 168;
  Best Local Similarity   98.9%;  Pred. No. 8.1e-20;
  Matches   86;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 60

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||| ||
Db         61 CAGGGATGGCTATATTTCTGGGAGCGA 87
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Search completed: January 6, 2005, 18:36:04
Job time : 86 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: January 6, 2005, 18:32:32 ; Search time 424 Seconds
(without alignments)
2462.927 Million cell updates/sec

Title: US-09-762-105A-14
Perfect score: 182
Sequence: 1 gagctcgctcccccgccgtc.....tgactggtggacaggctagc 182

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 4293498 seqs, 2868903791 residues

Total number of hits satisfying chosen parameters: 8586996

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
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2: /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10C_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10D_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US10E_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
19: /cgn2_6/ptodata/2/pubpna/US11_NEW_PUB.seq:*
20: /cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
21: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	93.6	51.4	1049	14	US-10-109-812-13	Sequence 13, Appl
c 2	92.6	50.9	2892	17	US-10-473-207-7	Sequence 7, Appli
3	90	49.5	130	14	US-10-109-812-1	Sequence 1, Appli
4	90	49.5	131	14	US-10-109-812-4	Sequence 4, Appli
c 5	90	49.5	4586	15	US-10-460-716-4	Sequence 4, Appli
c 6	87	47.8	1544	17	US-10-473-207-4	Sequence 4, Appli
7	87	47.8	2391	17	US-10-473-207-25	Sequence 25, Appl
8	85.8	47.1	179	18	US-10-737-251-1	Sequence 1, Appli
9	85.8	47.1	220	16	US-10-095-514-3	Sequence 3, Appli
10	85.8	47.1	233	18	US-10-737-251-38	Sequence 38, Appl
c 11	85.8	47.1	6477	16	US-10-377-134-63	Sequence 63, Appl
c 12	85.8	47.1	7652	17	US-10-680-824A-1	Sequence 1, Appli
13	85.8	47.1	8684	17	US-10-680-824A-2	Sequence 2, Appli
14	85.8	47.1	10011	17	US-10-680-824A-19	Sequence 19, Appl
c 15	85.4	46.9	1143	15	US-10-460-716-2	Sequence 2, Appli
16	85.4	46.9	1417	15	US-10-460-716-3	Sequence 3, Appli
17	85.4	46.9	2145	17	US-10-473-207-26	Sequence 26, Appl
18	84.8	46.6	144	10	US-09-940-925A-163	Sequence 163, App
19	84.8	46.6	144	10	US-09-941-193A-163	Sequence 163, App
20	83.8	46.0	105	15	US-10-241-872-9	Sequence 9, Appli
21	78.8	43.3	233	18	US-10-737-251-41	Sequence 41, Appl
c 22	78.4	43.1	8684	17	US-10-680-824A-2	Sequence 2, Appli
23	77.8	42.7	202	9	US-09-843-324A-1	Sequence 1, Appli
24	77.8	42.7	244	9	US-09-843-324A-2	Sequence 2, Appli
25	76.6	42.1	133	16	US-10-663-241-32	Sequence 32, Appl
26	74.6	41.0	234	18	US-10-737-251-42	Sequence 42, Appl
27	71	39.0	302	15	US-10-023-208-61	Sequence 61, Appl
c 28	71	39.0	5309	17	US-10-622-220-14	Sequence 14, Appl
29	71	39.0	5537	17	US-10-622-220-13	Sequence 13, Appl
30	70.8	38.9	237	18	US-10-737-251-43	Sequence 43, Appl
c 31	70.8	38.9	1993	15	US-10-460-716-1	Sequence 1, Appli
c 32	70.8	38.9	7455	15	US-10-219-227-19	Sequence 19, Appl
33	70	38.5	89	14	US-10-109-812-41	Sequence 41, Appl
34	69.8	38.4	183	15	US-10-258-253-16	Sequence 16, Appl
35	69.2	38.0	193	18	US-10-476-413-8	Sequence 8, Appli
36	69.2	38.0	399	13	US-10-085-476-12	Sequence 12, Appl
37	68.8	37.8	97	10	US-09-897-776A-17	Sequence 17, Appl
38	67.6	37.1	217	18	US-10-748-055-7	Sequence 7, Appli
39	67.6	37.1	5018	9	US-09-813-718-9	Sequence 9, Appli
40	67.6	37.1	5018	16	US-10-240-532-9	Sequence 9, Appli
41	67.6	37.1	5018	17	US-10-240-527A-9	Sequence 9, Appli
42	66.8	36.7	112	18	US-10-737-251-28	Sequence 28, Appl
43	66.8	36.7	652	18	US-10-748-055-9	Sequence 9, Appli
44	66.8	36.7	1057	9	US-09-987-107-51	Sequence 51, Appl
45	66.8	36.7	1088	9	US-09-987-107-49	Sequence 49, Appl

ALIGNMENTS

RESULT 1
US-10-109-812-13
; Sequence 13, Application US/10109812
; Publication No. US20030088081A1
; GENERAL INFORMATION:
; APPLICANT: Maliga, Pal
; APPLICANT: Corneille, Sylvie
; APPLICANT: Lutz, Kerry
; TITLE OF INVENTION: High Level Expression of Immunogenic Proteins in the
; TITLE OF INVENTION: Plastids of Higher Plants
; FILE REFERENCE: Rutgers-00-0038 CIP
; CURRENT APPLICATION NUMBER: US/10/109,812
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: PCT/US00/25930
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: 60/211,139
; PRIOR FILING DATE: 2000-06-13
; PRIOR APPLICATION NUMBER: 60/155,007
; PRIOR FILING DATE: 1999-09-21
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 1049
; TYPE: DNA
; ORGANISM: tobacco
US-10-109-812-13

Query Match 51.4%; Score 93.6; DB 14; Length 1049;
Best Local Similarity 75.0%; Pred. No. 5.5e-20;
Matches 117; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

Qy 1 GAGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTG 60
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 GAGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTG 60

```
Qy         61 AGGGGGCAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTCCCACTAGAAATA 120
              ||||||||||||||||||||||||||||||||    | |  | ||   | | |   || ||
Db         61 AGGGGGCAGGGATGGCTATATTTCTGGGAGAATTAACCGATCGACGTGCAAGCGGACATT 120

Qy        121 ATTTTGTTTAACTTTAAGAAGGAGATATACATATGG 156
                |||       |  |||       | | |||| | |
Db        121 TATTTTAAATTCGATAATTTTTGCAAAAACATTTCG 156


RESULT 2
US-10-473-207-7/c
; Sequence 7, Application US/10473207
; Publication No. US20040163145A1
; GENERAL INFORMATION:
;  APPLICANT: Maliga, Pal
;  APPLICANT:  Corneille, Sylvie
;  APPLICANT:  Lutz, Kerry
;  TITLE OF INVENTION: Integrases for the insertion of
;  TITLE OF INVENTION:  heterologous nucleic acids into the plastid genome
;  FILE REFERENCE: 1594-RUT.01-091US
;  CURRENT APPLICATION NUMBER: US/10/473,207
;  CURRENT FILING DATE:  2003-09-19
;  PRIOR APPLICATION NUMBER: PCT/US02/09537
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: 60/279615
;  PRIOR FILING DATE: 2001-03-29
;  NUMBER OF SEQ ID NOS: 29
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
;   LENGTH: 2892
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: donor vector
US-10-473-207-7

  Query Match             50.9%;  Score 92.6;  DB 17;  Length 2892;
  Best Local Similarity   74.8%;  Pred. No. 1.7e-19;
  Matches  116;  Conservative    0;  Mismatches   39;  Indels    0;  Gaps    0;

Qy          2 AGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGA 61
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1384 AGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGA 1325

Qy         62 GGGGGCAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTCCCACTAGAAATAA 121
              ||||||||||||||||||||||||||||||||    | |  | ||   | | |   || ||
Db       1324 GGGGGCAGGGATGGCTATATTTCTGGGAGAATTAACCGATCGACGTGCAAGCGGACATTT 1265

Qy        122 TTTTGTTTAACTTTAAGAAGGAGATATACATATGG 156
                |||       |  |||       | | |||| | |
Db       1264 ATTTTAAATTCGATAATTTTTGCAAAAACATTTCG 1230


RESULT 3
US-10-109-812-1
; Sequence 1, Application US/10109812
; Publication No. US20030088081A1
; GENERAL INFORMATION:
;  APPLICANT: Maliga, Pal
;  APPLICANT:  Corneille, Sylvie
;  APPLICANT:  Lutz, Kerry
;  TITLE OF INVENTION: High Level Expression of Immunogenic Proteins in the
;  TITLE OF INVENTION:  Plastids of Higher Plants
;  FILE REFERENCE: Rutgers-00-0038 CIP
;  CURRENT APPLICATION NUMBER: US/10/109,812
;  CURRENT FILING DATE:  2002-03-29
;  PRIOR APPLICATION NUMBER: PCT/US00/25930
;  PRIOR FILING DATE: 2000-09-21
;  PRIOR APPLICATION NUMBER: 60/211,139
;  PRIOR FILING DATE: 2000-06-13
;  PRIOR APPLICATION NUMBER: 60/155,007
;  PRIOR FILING DATE: 1999-09-21
;  NUMBER OF SEQ ID NOS: 57
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 1
;   LENGTH: 130
;   TYPE: DNA
;   ORGANISM: tobacco
US-10-109-812-1

  Query Match             49.5%;  Score 90;  DB 14;  Length 130;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-19;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GAGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GAGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTG 60

Qy         61 AGGGGGCAGGGATGGCTATATTTCTGGGAG 90
              ||||||||||||||||||||||||||||||
Db         61 AGGGGGCAGGGATGGCTATATTTCTGGGAG 90


RESULT 4
US-10-109-812-4
; Sequence 4, Application US/10109812
; Publication No. US20030088081A1
; GENERAL INFORMATION:
;  APPLICANT: Maliga, Pal
;  APPLICANT:  Corneille, Sylvie
;  APPLICANT:  Lutz, Kerry
;  TITLE OF INVENTION: High Level Expression of Immunogenic Proteins in the
;  TITLE OF INVENTION:  Plastids of Higher Plants
;  FILE REFERENCE: Rutgers-00-0038 CIP
;  CURRENT APPLICATION NUMBER: US/10/109,812
;  CURRENT FILING DATE:  2002-03-29
;  PRIOR APPLICATION NUMBER: PCT/US00/25930
;  PRIOR FILING DATE: 2000-09-21
;  PRIOR APPLICATION NUMBER: 60/211,139
;  PRIOR FILING DATE: 2000-06-13
;  PRIOR APPLICATION NUMBER: 60/155,007
;  PRIOR FILING DATE: 1999-09-21
;  NUMBER OF SEQ ID NOS: 57
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 131
;   TYPE: DNA
;   ORGANISM: tobacco
US-10-109-812-4

  Query Match             49.5%;  Score 90;  DB 14;  Length 131;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-19;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GAGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GAGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTG 60

Qy         61 AGGGGGCAGGGATGGCTATATTTCTGGGAG 90
              ||||||||||||||||||||||||||||||
Db         61 AGGGGGCAGGGATGGCTATATTTCTGGGAG 90


RESULT 5
US-10-460-716-4/c
; Sequence 4, Application US/10460716
; Publication No. US20030200568A1
; GENERAL INFORMATION:
;  APPLICANT: Maliga, Pal
;  APPLICANT:  Skarjinskaia, Marina
;  APPLICANT:  Svab, Zora
;  APPLICANT:  Rutgers, The State University of New Jersey
;  TITLE OF INVENTION: Plastid Transformation in Lesquerella
;  TITLE OF INVENTION:  Fendleri, an Oilseed Brassicacea
;  FILE REFERENCE: Rut 00-0109CIP
;  CURRENT APPLICATION NUMBER: US/10/460,716
```

```
;  CURRENT FILING DATE:  2003-06-12
;  PRIOR APPLICATION NUMBER: US/09/524,087A
;  PRIOR FILING DATE: 2000-03-13
;  PRIOR APPLICATION NUMBER: PCT/US97/03444
;  PRIOR FILING DATE: 1997-03-06
;  PRIOR APPLICATION NUMBER: 60/102,716
;  PRIOR FILING DATE:
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 4586
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Construct
US-10-460-716-4

  Query Match             49.5%;  Score 90;  DB 15;  Length 4586;
  Best Local Similarity   100.0%;  Pred. No. 1.5e-18;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GAGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3720 GAGCTCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTG 3661

Qy         61 AGGGGGCAGGGATGGCTATATTTCTGGGAG 90
              ||||||||||||||||||||||||||||||
Db       3660 AGGGGGCAGGGATGGCTATATTTCTGGGAG 3631


RESULT 6
US-10-473-207-4/c
; Sequence 4, Application US/10473207
; Publication No. US20040163145A1
; GENERAL INFORMATION:
;  APPLICANT: Maliga, Pal
;  APPLICANT:  Corneille, Sylvie
;  APPLICANT:  Lutz, Kerry
;  TITLE OF INVENTION: Integrases for the insertion of
;  TITLE OF INVENTION:  heterologous nucleic acids into the plastid genome
;  FILE REFERENCE: 1594-RUT.01-091US
;  CURRENT APPLICATION NUMBER: US/10/473,207
;  CURRENT FILING DATE:  2003-09-19
;  PRIOR APPLICATION NUMBER: PCT/US02/09537
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: 60/279615
;  PRIOR FILING DATE: 2001-03-29
;  NUMBER OF SEQ ID NOS: 29
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 1544
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: vector insert
US-10-473-207-4

  Query Match             47.8%;  Score 87;  DB 17;  Length 1544;
  Best Local Similarity   90.3%;  Pred. No. 9.1e-18;
  Matches   93;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy          6 CGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGG 65
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1394 CGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGG 1335

Qy         66 GCAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTC 108
              |||||||||||||||||||||||| ||    |    ||  |||
Db       1334 GCAGGGATGGCTATATTTCTGGGAGCGAACTCCGGGCGAATTC 1292


RESULT 7
US-10-473-207-25
; Sequence 25, Application US/10473207
; Publication No. US20040163145A1
; GENERAL INFORMATION:
;  APPLICANT: Maliga, Pal
;  APPLICANT:  Corneille, Sylvie
;  APPLICANT:  Lutz, Kerry
;  TITLE OF INVENTION: Integrases for the insertion of
;  TITLE OF INVENTION:  heterologous nucleic acids into the plastid genome
;  FILE REFERENCE: 1594-RUT.01-091US
;  CURRENT APPLICATION NUMBER: US/10/473,207
;  CURRENT FILING DATE:  2003-09-19
;  PRIOR APPLICATION NUMBER: PCT/US02/09537
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: 60/279615
;  PRIOR FILING DATE: 2001-03-29
;  NUMBER OF SEQ ID NOS: 29
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 25
;   LENGTH: 2391
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: plasmid fragment
US-10-473-207-25

  Query Match             47.8%;  Score 87;  DB 17;  Length 2391;
  Best Local Similarity   90.3%;  Pred. No. 1.1e-17;
  Matches   93;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy          6 CGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGG 65
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         12 CGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGG 71

Qy         66 GCAGGGATGGCTATATTTCTGGGAGGGAGACCACAACGGTTTC 108
              |||||||||||||||||||||||| ||    |    ||  |||
Db         72 GCAGGGATGGCTATATTTCTGGGAGCGAACTCCGGGCGAATTC 114


RESULT 8
US-10-737-251-1
; Sequence 1, Application US/10737251
; Publication No. US20040221338A1
; GENERAL INFORMATION:
;  APPLICANT: Pal Maliga
;  APPLICANT:  Jon Y. Suzuki
;  TITLE OF INVENTION: Plastid rRNA Operon PromoterElements for
;  TITLE OF INVENTION:  Construction of Chimeric Promoters for Transgene Expression
;  FILE REFERENCE: 1594 RUT 03-083US
;  CURRENT APPLICATION NUMBER: US/10/737,251
;  CURRENT FILING DATE:  2003-12-15
;  PRIOR APPLICATION NUMBER: 60/433,302
;  PRIOR FILING DATE: 2002-12-13
;  NUMBER OF SEQ ID NOS: 51
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 1
;   LENGTH: 179
;   TYPE: DNA
;   ORGANISM: Nicotiana tabacum
US-10-737-251-1

  Query Match             47.1%;  Score 85.8;  DB 18;  Length 179;
  Best Local Similarity   97.8%;  Pred. No. 9.8e-18;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         91 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 150

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              |||||||||||||||||||||||||| ||
Db        151 GGCAGGGATGGCTATATTTCTGGGAGCGA 179


RESULT 9
```

```
US-10-095-514-3
; Sequence 3, Application US/10095514
; Publication No. US20040093638A1
; GENERAL INFORMATION:
;  APPLICANT: Sasaki, Yukiko
;  APPLICANT:  Yokota, Akiho
;  APPLICANT:  Madoka, Yuka
;  TITLE OF INVENTION: Method for Promoting Fatty Acid Synthesis in a Plant
;  FILE REFERENCE: 026350-072
;  CURRENT APPLICATION NUMBER: US/10/095,514
;  CURRENT FILING DATE:  2002-03-13
;  PRIOR APPLICATION NUMBER: JP 2001-70,691
;  PRIOR FILING DATE: 2001-03-13
;  PRIOR APPLICATION NUMBER: JP 2001-300,038
;  PRIOR FILING DATE: 2001-09-28
;  NUMBER OF SEQ ID NOS: 11
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
;   LENGTH: 220
;   TYPE: DNA
;   ORGANISM: N. tabacum cv. Xanthi
US-10-095-514-3

 Query Match             47.1%;  Score 85.8;  DB 16;  Length 220;
  Best Local Similarity   97.8%;  Pred. No. 1.1e-17;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         28 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 87

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              |||||||||||||||||||||||||| ||
Db         88 GGCAGGGATGGCTATATTTCTGGGAGCGA 116


RESULT 10
US-10-737-251-38
; Sequence 38, Application US/10737251
; Publication No. US20040221338A1
; GENERAL INFORMATION:
;  APPLICANT: Pal Maliga
;  APPLICANT:  Jon Y. Suzuki
;  TITLE OF INVENTION: Plastid rRNA Operon PromoterElements for
;  TITLE OF INVENTION:  Construction of Chimeric Promoters for Transgene Expression
;  FILE REFERENCE: 1594 RUT 03-083US
;  CURRENT APPLICATION NUMBER: US/10/737,251
;  CURRENT FILING DATE:  2003-12-15
;  PRIOR APPLICATION NUMBER: 60/433,302
;  PRIOR FILING DATE: 2002-12-13
;  NUMBER OF SEQ ID NOS: 51
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 233
;   TYPE: DNA
;   ORGANISM: Nicotiana tabacum
US-10-737-251-38

  Query Match             47.1%;  Score 85.8;  DB 18;  Length 233;
  Best Local Similarity   97.8%;  Pred. No. 1.1e-17;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         32 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 91

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              |||||||||||||||||||||||||| ||
Db         92 GGCAGGGATGGCTATATTTCTGGGAGCGA 120


RESULT 11
US-10-377-134-63/c
; Sequence 63, Application US/10377134
; Publication No. US20040096938A1
; GENERAL INFORMATION:
;  APPLICANT: XU, Ming-Qun
;  APPLICANT:  EVANS, Thomas C.
;  APPLICANT:  PRADHAN, Sriharsa
;  APPLICANT:  COMB, Donald G.
;  APPLICANT:  PAULUS, Henry
;  APPLICANT:  SUN, Luo
;  APPLICANT:  CHEN, Lixin
;  APPLICANT:  GHOSH, Inca
;  TITLE OF INVENTION: METHOD FOR GENERATING SPLIT, NON-TRANSFERABLE GENES
;  TITLE OF INVENTION:  THAT ARE ABLE TO EXPRESS AN ACTIVE PROTEIN PRODUCT
;  FILE REFERENCE: NEB-219
;  CURRENT APPLICATION NUMBER: US/10/377,134
;  CURRENT FILING DATE:  2003-02-28
;  PRIOR APPLICATION NUMBER: 09/936,588
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: PCT/US00/14122
;  PRIOR FILING DATE: 2000-05-23
;  PRIOR APPLICATION NUMBER: 60/135,677
;  PRIOR FILING DATE: 1999-05-24
;  NUMBER OF SEQ ID NOS: 138
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 63
;   LENGTH: 6477
;   TYPE: DNA
;   ORGANISM: Unknown
;   FEATURE:
;   OTHER INFORMATION: Nucleotides 1-2482: E. coli vector pLITMUS28 (New
;   OTHER INFORMATION: England Biolabs, Inc.)
;   FEATURE:
;   OTHER INFORMATION: Nucleotides 2493-6242: Nicotiana tabaceum
;   FEATURE:
;   OTHER INFORMATION: Nucleotides  6243-6477: E. coli vector pLITMUS28
;   OTHER INFORMATION: (New England Biolabs, Inc.)
US-10-377-134-63

  Query Match             47.1%;  Score 85.8;  DB 16;  Length 6477;
  Best Local Similarity   97.8%;  Pred. No. 3.9e-17;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4016 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 3957

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              |||||||||||||||||||||||||| ||
Db       3956 GGCAGGGATGGCTATATTTCTGGGAGCGA 3928


RESULT 12
US-10-680-824A-1/c
; Sequence 1, Application US/10680824A
; Publication No. US20040133937A1
; GENERAL INFORMATION:
;  APPLICANT: Boudreau, Eric
;  APPLICANT:  Gu, Weining
;  APPLICANT:  De Framond, Anic
;  APPLICANT:  Heifetz, Peter
;  TITLE OF INVENTION: Plastid Transformation
;  FILE REFERENCE: 70149USNP
;  CURRENT APPLICATION NUMBER: US/10/680,824A
;  CURRENT FILING DATE:  2003-10-07
;  PRIOR APPLICATION NUMBER: 60/418596
;  PRIOR FILING DATE: 2002-07-10
;  NUMBER OF SEQ ID NOS: 29
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
;   LENGTH: 7652
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
```

```
;   OTHER INFORMATION: pEBPPOt plastid transformation vector (Example 1 VII).
US-10-680-824A-1

  Query Match             47.1%;  Score 85.8;  DB 17;  Length 7652;
  Best Local Similarity   97.8%;  Pred. No. 4.1e-17;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6646 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 6587

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||||||| ||
Db       6586 GGCAGGGATGGCTATATTTCTGGGAGCGA 6558


RESULT 13
US-10-680-824A-2
; Sequence 2, Application US/10680824A
; Publication No. US20040133937A1
; GENERAL INFORMATION:
;  APPLICANT: Boudreau, Eric
;  APPLICANT:  Gu, Weining
;  APPLICANT:  De Framond, Anic
;  APPLICANT:  Heifetz, Peter
;  TITLE OF INVENTION: Plastid Transformation
;  FILE REFERENCE: 70149USNP
;  CURRENT APPLICATION NUMBER: US/10/680,824A
;  CURRENT FILING DATE:  2003-10-07
;  PRIOR APPLICATION NUMBER: 60/418596
;  PRIOR FILING DATE: 2002-07-10
;  NUMBER OF SEQ ID NOS: 29
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
;   LENGTH: 8684
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: pEB8 (= pEB8a) plastid transformation vector (Example 2).
US-10-680-824A-2

  Query Match             47.1%;  Score 85.8;  DB 17;  Length 8684;
  Best Local Similarity   97.8%;  Pred. No. 4.3e-17;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2490 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 2549

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||||||| ||
Db       2550 GGCAGGGATGGCTATATTTCTGGGAGCGA 2578


RESULT 14
US-10-680-824A-19
; Sequence 19, Application US/10680824A
; Publication No. US20040133937A1
; GENERAL INFORMATION:
;  APPLICANT: Boudreau, Eric
;  APPLICANT:  Gu, Weining
;  APPLICANT:  De Framond, Anic
;  APPLICANT:  Heifetz, Peter
;  TITLE OF INVENTION: Plastid Transformation
;  FILE REFERENCE: 70149USNP
;  CURRENT APPLICATION NUMBER: US/10/680,824A
;  CURRENT FILING DATE:  2003-10-07
;  PRIOR APPLICATION NUMBER: 60/418596
;  PRIOR FILING DATE: 2002-07-10
;  NUMBER OF SEQ ID NOS: 29
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 19
;   LENGTH: 10011
;   TYPE: DNA
;   ORGANISM: artificial sequence
;   FEATURE:
;   OTHER INFORMATION: plasmid pEB10
US-10-680-824A-19

  Query Match             47.1%;  Score 85.8;  DB 17;  Length 10011;
  Best Local Similarity   97.8%;  Pred. No. 4.6e-17;
  Matches   87;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          5 TCGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 64
              | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4370 TTGCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGG 4429

Qy         65 GGCAGGGATGGCTATATTTCTGGGAGGGA 93
              ||||||||||||||||||||||||||| ||
Db       4430 GGCAGGGATGGCTATATTTCTGGGAGCGA 4458


RESULT 15
US-10-460-716-2/c
; Sequence 2, Application US/10460716
; Publication No. US20030200568A1
; GENERAL INFORMATION:
;  APPLICANT: Maliga, Pal
;  APPLICANT:  Skarjinskaia, Marina
;  APPLICANT:  Svab, Zora
;  APPLICANT:  Rutgers, The State University of New Jersey
;  TITLE OF INVENTION: Plastid Transformation in Lesquerella
;  TITLE OF INVENTION:  Fendleri, an Oilseed Brassicacea
;  FILE REFERENCE: Rut 00-0109CIP
;  CURRENT APPLICATION NUMBER: US/10/460,716
;  CURRENT FILING DATE:  2003-06-12
;  PRIOR APPLICATION NUMBER: US/09/524,087A
;  PRIOR FILING DATE: 2000-03-13
;  PRIOR APPLICATION NUMBER: PCT/US97/03444
;  PRIOR FILING DATE: 1997-03-06
;  PRIOR APPLICATION NUMBER: 60/102,716
;  PRIOR FILING DATE:
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
;   LENGTH: 1143
;   TYPE: DNA
;   ORGANISM: Nicotinium tobacum
US-10-460-716-2

  Query Match             46.9%;  Score 85.4;  DB 15;  Length 1143;
  Best Local Similarity   98.9%;  Pred. No. 2.7e-17;
  Matches   86;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 66
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1130 GCTCCCCCGCCGTCGTTCAATGAGAATGGATAAGAGGCTCGTGGGATTGACGTGAGGGGG 1071

Qy         67 CAGGGATGGCTATATTTCTGGGAGGGA 93
              |||||||||||||||||||||||||| ||
Db       1070 CAGGGATGGCTATATTTCTGGGAGCGA 1044


Search completed: January  6, 2005, 19:50:39
Job time : 426 secs
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